Scheiner, L.
09/594065

FILE 'REGISTRY' ENTERED AT 12:43:06 ON 22 SEP 2003
L1 85 SEA ABB=ON PLU=ON TCACCACCGTCAGCACCTTC|AGCAGGCCGCTGTCCT TG|CCCTGCGTAGTGGTACGACCTCCTGCAGGG|CCCTGCAAACTCGTG.TCCTCCA GCATGCAGGG/SQSN

FILE 'HCAPLUS' ENTERED AT 12:45:25 ON 22 SEP 2003
L2 30 SEA ABB=ON PLU=ON L1
L3 21 SEA ABB=ON PLU=ON L2 AND ((HERPES? OR HSV OR HV)(5A)(I OR 1) OR HSV1 OR HV1 OR HSVI OR HVI)

L3 ANSWER 1 OF 21 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2003:356705 HCAPLUS
DOCUMENT NUMBER: 138:362667
TITLE: Chemokine binding molecules
INVENTOR(S): Alcami, Antonio; Bryant, Neil; Davis-Poynter, Nicholas
PATENT ASSIGNEE(S): Cambridge University Technical Services Limited, UK; Animal Health Trust
SOURCE: PCT Int. Appl., 86 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003038440	A2	20030508	WO 2002-GB4918	20021030

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: GB 2001-26047 A 20011030
AB The present invention relates to a family of glycoproteins found in alpha herpesviruses (gG proteins) which bind chemokines and impair their biol. function. Methods and means relating to the use of gG proteins in the treatment of diseases, in particular chemokine-mediated diseases, are provided.
IT **391533-82-7**, GenBank X14112 **391834-38-1**, GenBank Z86099
RL: BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)
(chemokine binding mols.)

L3 ANSWER 2 OF 21 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2000:341483 HCAPLUS
DOCUMENT NUMBER: 133:247795
TITLE: Gene content phylogeny of herpesviruses
AUTHOR(S): Montague, Michael G.; Hutchison, Clyde A., III
CORPORATE SOURCE: Department of Microbiology and Immunology, University of North Carolina, Chapel Hill, NC,

27599-7290, USA
SOURCE: Proceedings of the National Academy of Sciences of the United States of America (2000), 97(10), 5334-5339
CODEN: PNASA6; ISSN: 0027-8424
PUBLISHER: National Academy of Sciences
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Clusters of orthologous groups (COGs) were identified for a set of 13 completely sequenced herpesviruses. Each COG represented a family of gene products conserved across several herpes genomes. These families were defined without using an arbitrary threshold criterion based on sequence similarity. The COG technique was modified so that variable stringency in COG construction was possible. High stringencies identify a core set of highly conserved genes. Varying COG stringency reveals differences in the degree of conservation between functional classes of genes. The COG data were used to construct whole-genome phylogenetic trees based on gene content. These trees agree well with trees based on other methods and are robust when tested by bootstrap anal. The COG data also were used to construct a reciprocal tree that clustered genes with similar phylogenetic profiles. This clustering may give clues to genes with related functions or with related histories of acquisition and loss during herpesvirus evolution.

IT **141157-47-3**, GenBank X14112 **187125-82-2**, GenBank Z86099
RL: BUU (Biological use, unclassified); PRP (Properties); BIOL (Biological study); USES (Uses)
(gene content phylogeny of herpesviruses)

REFERENCE COUNT: 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 3 OF 21 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2000:240140 HCAPLUS
DOCUMENT NUMBER: 132:261299

TITLE: **Herpes** simplex virus **1** (**HSV-1**) strain HSZP glycoprotein B gene: comparison of mutations among strains differing in virulence

AUTHOR(S): Kosovsky, Jan; Vojvodova, Andrea; Oravcova, Ingeborg; Kudelova, Marcela; Matis, Jan; Rajcani, Julius
CORPORATE SOURCE: Institute of Virology, Slovak Academy of Sciences, Bratislava, 84246, Slovakia

SOURCE: Virus Genes (2000), 20(1), 27-33
CODEN: VIGEET; ISSN: 0920-8569
PUBLISHER: Kluwer Academic Publishers
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The nonpathogenic HSZP strain of **HSV-1** induces large polykaryocytes due to a syn3 mutations (His for Arg at residue 858) in the C-terminal endodomain of glycoprotein B (gB) (40). We detd. the nucleotide (nt) sequence of the UL27 gene specifying the gB polypeptide of HSZP (gBHSZP) and found 3 mutations in its ectodomain at amino acids (aa) 59, 79 and 108. The ANGpath virus, which also has a syn3 mutation in the C-terminal endodomain of gB (Val for Ala at residue 855) is pathogenic for adult mice (39), but

can be made nonpathogenic by replacing the gBANGpath gene by the corresponding gBKOS sequence (21). The gBANGpath had three ectodomain mutations (at aa 62, 77 and 285), while gBKOS had at least four ectodomain mutations (aa 59, 79, 313, and 553). Two mutations (aa 59 and 79) in the latter, located in the variable antigenic site IV/D1 were common for gBKOS and gBHSZP. These together with the gBANGpath mutations at aa 62 and 77 create a cluster of 4 mutations in diverse region of the N-terminal part of gB (between aa 59-79), in which the gBs of pathogenic ANGpath and 17 viruses differ from the gBs of nonpathogenic HSZP and KOS viruses. The lower pathogenicity of KOS as related to gBKOS, is furthermore assocd. with the change of Ser to Thr at aa 313 (locus III/D2). The possibility is discussed that mutations in both above mentioned antigenic loci could result in higher immunogenicity of the corresponding antigenic epitopes, which, in turn, would contribute to the decreased virulence of HSZP and KOS viruses.

IT **246050-56-6**, GenBank AF097023
RL: ADV (Adverse effect, including toxicity); PRP (Properties); BIOL (Biological study)
(nucleotide sequence; **herpes** simplex virus **1** strain HSZP glycoprotein B gene: comparison of mutations among strains differing in virulence)

REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 4 OF 21 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1999:753367 HCAPLUS
DOCUMENT NUMBER: 132:949
TITLE: Mutant herpes simplex viruses and uses thereof for nervous system gene therapy
INVENTOR(S): Coffin, Robert Stuart; Latchman, David Seymour
PATENT ASSIGNEE(S): Neuro Vex Limited, UK
SOURCE: PCT Int. Appl., 31 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9960145	A1	19991125	WO 1999-GB1598	19990520
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
CA 2328594	AA	19991125	CA 1999-2328594	19990520
AU 9939466	A1	19991206	AU 1999-39466	19990520
AU 756892	B2	20030123		
EP 1080215	A1	20010307	EP 1999-922369	19990520
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				

GB 2359083	A1	20010815	GB 2000-30820		19990520
GB 2359083	B2	20030312			
BR 9910594	A	20011030	BR 1999-10594		19990520
JP 2002515256	T2	20020528	JP 2000-549751		19990520
PRIORITY APPLN. INFO.:			GB 1998-10904	A	19980520
			WO 1999-GB1598	W	19990520

AB The present invention relates to mutant herpes simplex viruses comprising elements of the HSV latency assocd. transcript (LAT) region inserted into an essential gene and a deletion in the corresponding sequences of the endogenous LAT region. The HSV of the invention can be used in the treatment of disorders of, or injuries to, the nervous system of a mammal. It also relates to the use of such mutant herpes simplex viruses in gene therapy and in methods of assaying for gene function.

IT **141157-47-3**, GenBank X14112
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(nucleotide sequence, deletion of LAT sequence from, nucleotides 118866 to 120219 or 117159 to 118865; mutant herpes simplex viruses and uses thereof for nervous system gene therapy)

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 5 OF 21 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER:	1999:370891 HCAPLUS
DOCUMENT NUMBER:	131:194970
TITLE:	Development of a high-throughput quantitative assay for detecting herpes simplex virus DNA in clinical samples
AUTHOR(S):	Ryncarz, Alexander J.; Goddard, James; Wald, Anna; Huang, Meei-Li; Roizman, Bernard; Corey, Lawrence
CORPORATE SOURCE:	Departments of Laboratory Medicine, University of Chicago, Chicago, IL, USA
SOURCE:	Journal of Clinical Microbiology (1999), 37(6), 1941-1947 CODEN: JCMIDW; ISSN: 0095-1137
PUBLISHER:	American Society for Microbiology
DOCUMENT TYPE:	Journal
LANGUAGE:	English

AB We have developed a high-throughput, semiautomated, quant. fluorescence-based PCR assay to detect and type herpes simplex virus (HSV) DNA in clin. samples. The detection assay, which uses primers to the type-common region of HSV glycoprotein B (gB), was linear from <10 to 108 copies of HSV DNA/20 .mu.l of sample. Among duplicate samples in reproducibility runs, the assay showed less than 5% variability. We compared the fluorescence-based PCR assay with culture and gel-based liq. hybridization system with 335 genital tract specimens from HSV type 2 (HSV-2)-seropos. persons attending a research clinic and 380 consecutive cerebrospinal fluid (CSF) samples submitted to a diagnostic virol. lab. Among the 162 culture-pos. genital tract specimens, TaqMan PCR was pos. for 157 (97%) specimens, whereas the quant.-competitive PCR was pos. for 144 (89%) specimens. Comparisons of the mean titer of HSV DNA detected by the two assays revealed that the mean titer detected by the gel-based system was slightly higher (median, 1 log). These differences in titers were in part related to the fivefold

difference in the amt. of HSV DNA used in the amplicon stds. with the two assays. Among the 380 CSF samples, 42 were pos. by both assays, 13 were pos. only by the assay with the agarose gel, and 3 were pos. only by the assay with the fluorescent probe. To define the subtype of HSV DNA detected in the screening assay, we also designed one set of primers which amplifies the gG regions of both types of HSV and probes which are specific to either **HSV-1** (gG1) or **HSV-2** (gG2). These probes were labeled with different fluorescent dyes (6-carboxyfluorescein for gG2 and 6-hexachlorofluorescein for gG1) to enable detection in a single PCR. In mixing expts. the probes discriminated the correct subtype in mixts. with up to a 7-log-higher concn. of the opposite subtype. The PCR typing results showed 100% concordance with the results obtained by assays with monoclonal antibodies against **HSV-1** or **HSV-2**. Thus, while the real-time PCR is slightly less sensitive than the gel-based liq. hybridization system, the high throughput, the lack of contamination during processing, the better reproducibility, and the better ability to type the isolates rapidly make the real-time PCR a valuable tool for clin. investigation and diagnosis of HSV infection.

IT **240797-43-7**
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
(HSV glycoprotein B gene specific reverse primer HSV-RP; development of a high-throughput quant. assay for detecting herpes simplex virus DNA in clin. samples)

REFERENCE COUNT: 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 6 OF 21 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1998:681940 HCAPLUS
DOCUMENT NUMBER: 129:314960
TITLE: Avirulent herpetic viruses useful as tumoricidal agents and vaccines
INVENTOR(S): Mohr, Ian J.; Gluzman, Yakov
PATENT ASSIGNEE(S): American Cyanamid Company, USA
SOURCE: U.S., 22 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5824318	A	19981020	US 1996-686631	19960724

PRIORITY APPLN. INFO.: US 1996-686631 19960724

AB Isolated tumoricidal herpetic viruses, in particular neurotrophic herpes viruses, T-lymphotrophic viruses, and B-lymphotrophic viruses, which are avirulent and capable of selectively replicating in and destroying neoplastic cells, and pharmaceutical compns., vaccines, and methods of destroying neoplastic cells employing the isolated tumoricidal herpetic viruses are described. A method of isolating tumoricidal herpetic viruses by sequentially passaging attenuated, avirulent herpetic viruses on neoplastic cells which fail to support replication of the herpetic viruses and isolating the viruses which grow on the neoplastic cells is also described.

Herpes simplex virus mutants having a genome from which the .gamma.34.5 genes have been deleted and which require at least one addnl. mutation to produce a non-neurovirulent herpes simplex virus which selectively replicates in and destroys neoplastic cells are also described.

IT **141157-47-3**, Genbank X14112 **187125-82-2**, Genbank Z86099
RL: BSU (Biological study, unclassified); BIOL (Biological study) (avirulent herpetic viruses useful as tumoricidal agents and vaccines)

REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 7 OF 21 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1998:113207 HCAPLUS
DOCUMENT NUMBER: 128:253529
TITLE: The genome sequence of herpes simplex virus type 2
AUTHOR(S): Dolan, Aidan; Jamieson, Fiona E.; Cunningham, Charles; Barnett, Barbara C.; McGeoch, Duncan J.
CORPORATE SOURCE: MRC Virology Unit, Inst. Virology, Glasgow, G11 5JR, UK
SOURCE: Journal of Virology (1998), 72(3), 2010-2021
CODEN: JOVIAM; ISSN: 0022-538X
PUBLISHER: American Society for Microbiology
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The genomic DNA sequence of herpes simplex virus type 2 (HSV-2) strain HG52 was detd. as 154,746 bp with a G+C content of 70.4%. A total of 74 genes encoding distinct proteins was identified; three of these were each present in two copies, within major repeat elements of the genome. The HSV-2 gene set corresponds closely with that of **HSV-1**, and the **HSV**-2 sequence prompted several local revisions to the published **HSV-1** sequence. No compelling evidence for the existence of any addnl. protein-coding genes in HSV-2 was identified.

IT **187125-82-2**, DNA (human herpesvirus 2 strain HG52)
RL: BOC (Biological occurrence); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study); OCCU (Occurrence)
(nucleotide sequence; of herpes simplex virus type 2 genome)

REFERENCE COUNT: 86 THERE ARE 86 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 8 OF 21 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1997:51776 HCAPLUS
DOCUMENT NUMBER: 126:101630
TITLE: Identification of the fusion-from-without determinants of **herpes** simplex virus type **1** glycoprotein B
AUTHOR(S): Saharkhiz-Langroodi, Ali; Holland, Thomas C.
CORPORATE SOURCE: Dep. Immunol. Microbiol., Wayne State Univ. Med. Sch., Detroit, MI, 48201, USA
SOURCE: Virology (1997), 227(1), 153-159
CODEN: VIRLAX; ISSN: 0042-6822
PUBLISHER: Academic

DOCUMENT TYPE: Journal
LANGUAGE: English
AB Fusion-from-without (FFWO) is the rapid induction of cell fusion at high multiplicities of infection and in the absence of viral protein synthesis. The ANG path strain and several other strains of **herpes** simplex virus type **1** (**HSV-1**) effectively cause FFWO of Vero cells. FFWO-inducing strains of **HSV-1** contain syncytial mutations in the gB cytoplasmic domain; however, not all strains with such syncytial mutations cause FFWO. By characterization of recombinant viruses contg. chimeric gB genes, it was shown that determinants in both the gB ectodomain and gB cytoplasmic domain control the FFWO phenotype of **HSV-1**. The complete nucleotide sequence of the ANG path gB gene was detd. Comparison of the predicted amino acid sequence of ANG path gB with other **HSV-1** gB sequences showed that the gB genes of FFWO-inducing viruses must contain both syncytial mutations in the gB cytoplasmic domain and the fast rate-of-entry determinant at residue 553 in the gB ectodomain.
IT **174253-33-9**, GenBank u49121
RL: PRP (Properties)
(nucleotide sequence; **herpes** simplex virus type **1** glycoprotein B)

L3 ANSWER 9 OF 21 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1992:122643 HCAPLUS
DOCUMENT NUMBER: 116:122643
TITLE: Recombinant manufacture of fusion proteins of surface antigens gB and gD of herpes simplex virus (HSV)
INVENTOR(S): Fujisawa, Yukio; Hinuma, Shuji; Otaka, Sachiko; Mayumi, Aki
PATENT ASSIGNEE(S): Takeda Chemical Industries, Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 16 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 03220200	A2	19910927	JP 1990-325474	19901129

PRIORITY APPLN. INFO.: JP 1989-308942 19891130
AB A fusion protein comprised of truncated surface antigen gB and gD of HSV is manufd. by expression of the chimeric gene in eukaryotic cells. The fusion protein can be used as vaccine against **HSV** types **I** and II. Plasmid pHSBD106.DELTA.Tth encoding the truncated gB and gD of **HSV-1** Miyama strain, wherein the transmembrane regions were removed, was prepd. The prodn. of the fusion protein by the transformed Saccharomyces cerevisiae was detected.
IT **139382-49-3**
RL: BIOL (Biological study)
(nucleotide sequence of and expression in Saccharomyces cerevisiae of gene for)

L3 ANSWER 10 OF 21 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1992:77825 HCAPLUS
DOCUMENT NUMBER: 116:77825
TITLE: Molecular cloning of the gene for the surface antigen gB of herpes simplex virus
INVENTOR(S): Fujisawa, Yukio; Hinuma, Kuniji; Asakawa, Naoki; Otaka, Sachiko
PATENT ASSIGNEE(S): Takeda Chemical Industries, Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 24 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 03218397	A2	19910925	JP 1990-161448	19900621
PRIORITY APPLN. INFO.:			JP 1989-158238	19890622
			JP 1989-308941	19891130

AB The gene encoding the gB antigen of herpes simplex virus (HSV) is cloned and its amino acid sequence deduced. A truncated sequence is also prepd. Both sequences are expressed in Saccharomyces cerevisiae. The DNA sequences and expression method thus disclosed are useful in manufg. vaccine against HSV. The gene was cloned from **HSV-1** Miyama-type using the synthetic oligonucleotides encoding the N-terminal gB antigen of **HSV -1** F-strain as probes. Expression plasmids pHSB106 and pHSB106.DELTA.Tth for the natural and the truncated gB antigens, resp., were constructed. Their expressions in S. cerevisiae were detectable.

IT **138756-24-8**
RL: BIOL (Biological study)
(nucleotide sequence and cloning in Escherichia coli and expression in Saccharomyces cerevisiae of)

IT **138756-23-7**, Deoxyribonucleic acid (**herpes** simplex virus **1** strain Miyama clone pHSB200 glycoprotein B-specifying)
RL: BIOL (Biological study)
(nucleotide sequence and cloning in Escherichia coli and expression in Saccharomyces cerevisiae of, complete)

IT **138756-22-6**
RL: PRP (Properties); BIOL (Biological study)
(nucleotide sequence and cloning in Escherichia coli of, complete)

L3 ANSWER 11 OF 21 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1991:672654 HCAPLUS
DOCUMENT NUMBER: 115:272654
TITLE: Expression of chimeric genes for fusion proteins of antigens and interleukin-2 in animal cells
INVENTOR(S): Fujisawa, Yukio; Hinuma, Shuji; Mayumi, Aki
PATENT ASSIGNEE(S): Takeda Chemical Industries, Ltd., Japan
SOURCE: Eur. Pat. Appl., 60 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 406857	A1	19910109	EP 1990-112851	19900705
EP 406857	B1	19950524		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE				
CA 2020668	AA	19910108	CA 1990-2020668	19900706
CA 2020668	C	20011002		
JP 04117399	A2	19920417	JP 1990-177258	19900706
JP 3123719	B2	20010115		
US 5556946	A	19960917	US 1995-386354	19950208
US 5728552	A	19980317	US 1996-600545	19960213

PRIORITY APPLN. INFO.:
JP 1989-176036 A 19890707
JP 1990-52816 A 19900306
JP 1990-93938 A 19900411
JP 1990-138180 A 19900530
US 1990-548509 B1 19900702
US 1993-86429 B1 19930630
US 1995-386354 A3 19950208

AB Fusion proteins of viral antigens and lymphokines for use as vaccines that are more active as antigens than the viral antigen alone are prepd. by expression of the chimeric gene in an appropriate host. A fusion protein of the **herpes** simplex virus-**1** (**HSV-1**) glycoprotein gD and human interleukin 2 was constructed and introduced into a eukaryotic expression vector for expression in CHO cells. Transformed cells produced a protein that had IL-2 activity and reacted with anti-gD antibody. When the fusion protein or a protein equiv. to the gD fragment only were injected into mice the fusion protein was .apprx.20-fold more active in raising anti-gD antibody than the gD peptide alone when no adjuvant was used. When an adjuvant (alum) was used the difference was .apprx.2.5-fold. Mice inoculated with these antigens were then challenged with **HSV-1**. Only those inoculated with the fusion protein showed any resistance to the challenge. Mice inoculated with saline or the glycoprotein only all showed symptoms or died. Only one of 11 mice inoculated with the fusion protein died.

IT **95077-19-3**, Deoxyribonucleic acid (**herpes** simplex virus **1** strain F glycoprotein B gene) **134802-63-4**, Deoxyribonucleic acid (**herpes** simplex virus **1** glycoprotein B gene) **134802-64-5**, Deoxyribonucleic acid (**herpes** simplex virus **1** strain F glycoprotein B gene plus 5'- and 3'-flanking region fragment) **134802-65-6**, Deoxyribonucleic acid (**herpes** simplex virus **1** strain KOS glycoprotein B gene plus 5'- and 3'-flanking region fragment) **134802-67-8**, Deoxyribonucleic acid (**herpes** simplex virus **1** strain Miyama glycoprotein B gene) **134802-68-9**, Deoxyribonucleic acid (**herpes** simplex virus **1** strain Miyama glycoprotein B gene plus 5'- and 3'-flanking region fragment)
RL: PRP (Properties); BIOL (Biological study)
(nucleotide sequence of)

L3 ANSWER 12 OF 21 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1989:113190 HCAPLUS
DOCUMENT NUMBER: 110:113190
TITLE: A glycoprotein of Herpes Simplex Virus, its manufacture, and use as vaccine

INVENTOR(S): Nakatake, Hiroshi; Nozaki, Chikahide; Kino, Yoichiro; Hamada, Fukusaburo
PATENT ASSIGNEE(S): Chemo-Sero-Therapeutic Research Institute, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 13 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 63066200	A2	19880324	JP 1986-209830	19860907

PRIORITY APPLN. INFO.: JP 1986-209830 19860907

AB A 50,000-mol.-wt. glycoprotein (**I**) is enzymically prepd. from **herpes** simplex virus (HSV) glycoprotein (gB) manufd. by recombinant yeasts. Saccharomyces cerevisiae transformed with the gB expression vector pYGB1 was cultivated with a conventional method. GB (93,000) recovered from the cells was treated with protease Forcecin Y-1 to obtain I. The immunogenicity of **I** and its protective effects against **HSV** infection in mice were better than that of gB.

IT **119330-92-6**, Deoxyribonucleic acid (**herpes** simplex virus **1** clone pYGB1 glycoprotein B gene)
119330-93-7, Deoxyribonucleic acid (**herpes** simplex virus **1** clone pYGB1 glycoprotein B gene plus 5'- and 3'-flanking region fragment)
RL: BIOL (Biological study)
(cloning and expression in Saccharomyces cerevisiae and nucleotide sequence of, 50,000-mol.-wt. deriv. manuf. in relation to)

L3 ANSWER 13 OF 21 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1989:34475 HCAPLUS
DOCUMENT NUMBER: 110:34475
TITLE: The complete DNA sequence of the long unique region in the genome of **herpes** simplex virus type **1**
AUTHOR(S): McGeoch, D. J.; Dalrymple, M. A.; Davison, A. J.; Dolan, A.; Frame, M. C.; McNab, D.; Perry, L. J.; Scott, J. E.; Taylor, P.
CORPORATE SOURCE: Inst. Virol., Univ. Glasgow, Glasgow, G11 5JR, UK
SOURCE: Journal of General Virology (1988), 69(7), 1531-74
CODEN: JGVIAY; ISSN: 0022-1317
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The DNA sequence was detd. of the long unique region (UL) in the genome of **herpes** simplex virus type **1** (**HSV-1**) strain 17. The UL sequence contained 107,943 residues and had a base compn. of 66.9% G+C. Together with previous work, this completes the sequence of **HSV-1** DNA, giving a total genome length of 152,260 residues of base compn. 68.3% G+C. Genes in the UL region were located by the use of published mapping analyses, transcript structures, and sequence data, and by examn. of DNA sequence characteristics. Fifty-six genes were identified, accounting for most of the

sequence. Some 28 of these are at present of unknown function. The gene layout for UL was very similar to that for the corresponding part of the genome of varicella-zoster virus, the only other completely sequenced alphaherpesvirus, and the amino acid sequences of equiv. proteins showed a range of similarities. In the whole genome of **HSV-1**, some 72 genes which encode 70 distinct proteins are recognized.

IT **118366-27-1**, Deoxyribonucleic acid (**herpes** simplex virus **1** strain 17 gene UL27)
RL: PRP (Properties); BIOL (Biological study)
(nucleotide sequence of)

L3 ANSWER 14 OF 21 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1988:597165 HCAPLUS
DOCUMENT NUMBER: 109:197165
TITLE: Vaccine for use in the therapeutic treatment of herpes simplex virus (HSV)
INVENTOR(S): Burke, Rae Lyn; Pachl, Carol; Valenzuela, Pablo D. T.
PATENT ASSIGNEE(S): Chiron Corp., USA
SOURCE: PCT Int. Appl., 74 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 5
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 8802634	A1	19880421	WO 1987-US2709	19871020
W: JP				
RW: AT, BE, CH, DE, FR, GB, IT, LU, NL, SE				
EP 289550	A1	19881109	EP 1987-907206	19871020
EP 289550	B1	19960410		
R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE				
JP 01500999	T2	19890406	JP 1987-506541	19871020
CA 1337395	A1	19951024	CA 1987-549786	19871020
AT 136468	E	19960415	AT 1987-907206	19871020
JP 11123090	A2	19990511	JP 1998-222018	19871020
JP 2003235588	A2	20030826	JP 2002-382559	19871020
US 5171568	A	19921215	US 1989-416425	19891002
US 5750114	A	19980512	US 1995-452963	19950530
JP 09131193	A2	19970520	JP 1996-273781	19961016
JP 2999966	B2	20000117		

PRIORITY APPLN. INFO.:

US 1986-921213	A	19861020
US 1987-79605	A	19870720
US 1984-597784	B2	19840406
US 1984-631669	A2	19840717
JP 1987-506541	A3	19871020
JP 1998-222018	A3	19871020
WO 1987-US2709	W	19871020
US 1989-416425	A1	19891002
US 1992-990919	B1	19921215
US 1995-385731	A1	19950208

AB A vaccine for therapeutic treatment of HSV infections comprises recombinant glycoproteins gB or gD, or mixts. thereof. The genes for **HSV-1** strain Patton gB1 and gD1 and for HSV-2 strain 333 gB2 and gD2 were cloned and mammalian cell

expression vectors constructed. Guinea pigs infected with HSV-2 MS strain were inoculated with HSV-2 total glycoprotein, with recombinant gB1 and gD1, or with only adjuvant. Immunization with glycoproteins significantly decreased rate of recurrence of herpetic lesion and the mixt. of recombinant glycoproteins was better that the mixt. of natural glycoproteins. Administration of the vaccine during an acute phase of the disease significantly lessened the recurrence of the disease.

IT **107565-05-9**, Deoxyribonucleic acid (herpes simplex virus 2 strain 333 clone pHS208 glycoprotein B gene) **117443-26-2**
RL: BIOL (Biological study)
(CHO cell expression vectors contg. fragments of, for vaccine prepn.)

IT **104137-45-3**, Deoxyribonucleic acid (**herpes** simplex virus **1** strain Patton glycoprotein B gene)
RL: BIOL (Biological study)
(nucleotide sequence and expression in CHO cells of)

IT **117443-27-3**
RL: PRP (Properties)
(nucleotide sequence of)

L3 ANSWER 15 OF 21 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1988:32766 HCAPLUS
DOCUMENT NUMBER: 108:32766
TITLE: The pseudorabies virus gII gene is closely related to the gB glycoprotein gene of herpes simplex virus
AUTHOR(S): Robbins, A. K.; Dorney, D. J.; Wathen, M. W.; Whealy, M. E.; Gold, C.; Watson, R. J.; Holland, L. E.; Weed, S. D.; Levine, M.; et al.
CORPORATE SOURCE: Cent. Res. Dev. Dep., E. I. du Pont de Nemours and Co., Wilmington, DE, 19898, USA
SOURCE: Journal of Virology (1987), 61(9), 2691-701
CODEN: JOVIAM; ISSN: 0022-538X
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Conserved DNA sequences were examd. in four **herpes** simplex virus type **1** (**HSV-1**) glycoprotein genes encoding gB, gC, gD, and gE and pseudorabies virus (PRV) DNA. **HSV-1** DNA fragments representing these four glycoprotein-coding sequences were hybridized to restriction enzyme fragments of PRV DNA by the Southern blot procedure. Specific hybridization was obsd. only when **HSV-1** gB DNA was used as probe. This region of hybridization was localized to a 5.2-kilobase (kb) region mapping at .apprx.0.15 map units on the PRV genome. Northern blot (RNA blot) anal., with a 1.2-kb probe derived from this segment, revealed a predominant hybridizing RNA species of .apprx.3 kb in PRV-infected PK15 cells. DNA sequence anal. of the region corresponding to this RNA revealed a single large open reading frame with significant nucleotide homol. with the gB gene of **HSV-1** KOS 321. In addn., the beginning of the sequenced PRV region also contained the end of an open reading frame with amino acid homol. to **HSV-1** ICP 18.5, a protein that may be involved in viral glycoprotein transport. This sequence partially overlaps the PRV gB homolog coding sequence. The PRV gene with homol. to **HSV-1** gB encoded the gII glycoprotein gene as shown by expressing a 765-base-pair segment of the PRV open reading frame in Escherichia coli as a protein fused to

.beta.-galactosidase. Antiserum, raised in rabbits, against this fusion protein immunopptd. a specific family of PRV glycoproteins of apparent mol. mass 110, 68, and 55 kilodaltons that have been identified as the gII family of glycoproteins. Anal. of the predicted amino acid sequence indicated that the PRV gII protein shares 50% amino acid homol. with the aligned **HSV-1** gB protein. All 10 cysteine residues located outside of the signal sequence, as well as 4 of 6 potential N-linked glycosylation sites, were conserved between the two proteins. The primary protein sequence for **HSV-1** gB regions known to be involved in the rate of virus entry into cells and cell-cell fusion, as well as regions known to be assocd. with monoclonal antibody resistance, were highly homologous with the PRV protein sequence. Furthermore, monospecific antibody made against PRV gII immunopptd. **HSV-1** gB from infected cells. Taken together, these findings suggest significant conservation of structure and function between the two proteins and may indicate a common evolutionary history.

IT **112263-08-8**
RL: PRP (Properties); BIOL (Biological study)
(nucleotide sequence of)

L3 ANSWER 16 OF 21 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1987:208535 HCAPLUS
DOCUMENT NUMBER: 106:208535
TITLE: Structure and expression of the herpes simplex virus type 2 glycoprotein gB gene
AUTHOR(S): Stuve, Laura L.; Brown-Shimer, Sheryl; Pachl, Carol; Najarian, Richard; Dina, Dino; Burke, Rae Lyn
CORPORATE SOURCE: Chiron Corp., Emeryville, CA, 94608, USA
SOURCE: Journal of Virology (1987), 61(2), 326-35
CODEN: JOVIAM; ISSN: 0022-538X
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The gene glycoprotein gB2 of herpes simplex virus type 2 strain 333 was cloned, sequenced, and expressed in mammalian cells. The gB2 protein had an overall nucleotide and amino acid sequence homol. of 86% with the cognate gB1 protein. However, of the 125 amino acid substitutions or deletions, only 12.5% were conservative replacements. These differences were clustered within an NH2-terminal region, a central region, and a COOH-terminal region, resulting in domains of near identity broken by small regions of marked divergence. Regions of greatest homol. included a 90-amino-acid stretch starting at residue 484 and 39 amino acids spanning residues 835 to 873, which cover a rate-of-entry locus mapped to Ala-552 and a syn locus mapped to Arg-857, resp., in gB1 by D.J. Bzik, et al. (1984). K. G. Pellett, et al. (1985) mapped the mutations in 3 monoclonal antibody-resistant gB1 mutants between amino acids 273 and 443. These epitopes are included in a region of 98 residues identical between gB1 and gB2. The identity of this protein was verified by placing a truncated gene lacking the 303 carboxyl-terminal amino acids of gB2 into mammalian COS and CHO cells. Expression was demonstrated by immunofluorescence and radioimmunopptn. This protein can be purified from the stable CHO cell lines and compared with gB1 for immunogenicity and protective efficacy in animal challenge models.

IT **104137-45-3 107565-05-9**

RL: PRP (Properties); BIOL (Biological study)
(nucleotide sequence of)

L3 ANSWER 17 OF 21 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1987:114355 HCAPLUS
DOCUMENT NUMBER: 106:114355
TITLE: The nucleotide sequence of the gB glycoprotein gene of HSV-2 and comparison with the corresponding gene of **HSV-1**
AUTHOR(S): Bzik, David J.; Debroy, Chitrita; Fox, Barbara A.; Pederson, Nels E.; Person, Stanley
CORPORATE SOURCE: Dep. Mol. Cell Biol., Pennsylvania State Univ., University Park, PA, 16802, USA
SOURCE: Virology (1986), 155(2), 322-33
CODEN: VIRLAX; ISSN: 0042-6822
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The nucleotide sequence of the gB glycoprotein gene of HSV-2 has been detd. and compared with the homologous gene of **HSV-1**. The two genes are specified by the same total no. of codons (904); eight addnl. codons of the **HSV-1** gene are found within the signal sequence, and eight addnl. codons of the HSV-2 gene are found at three different sites in the gene. The signal cleavage, membrane-spanning, and eight potential N-linked oligosaccharide sites, as well as 5'- and 3'-regulatory signals are largely conserved. The overall amino acid homol. is 85%; least conserved are the N- and C-terminal regions of the protein. Secondary structure plots were detd. for the two proteins, and the structures were compared with each other and with alterations in structure due to several mutations in the **HSV-1** gB gene for which sequence anal. is available. The high homol. in primary and secondary structure suggests a conserved, essential function for the gene.
IT **91117-04-3 91117-05-4 91117-06-5**
107216-58-0 107216-59-1
RL: PRP (Properties); BIOL (Biological study)
(nucleotide sequence of)

L3 ANSWER 18 OF 21 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1986:520737 HCAPLUS
DOCUMENT NUMBER: 105:120737
TITLE: Recombinant herpes simplex gB-gD vaccine
INVENTOR(S): Burke, Rae Lyn; Pachl, Carol; Valenzuela, Pablo D. T.; Urdea, Mickey S.
PATENT ASSIGNEE(S): Chiron Corp., USA
SOURCE: PCT Int. Appl., 81 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 5
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 8504587	A1	19851024	WO 1985-US587	19850404
RW: AT, BE, CH, DE, FR, GB, IT, LU, NL, SE				
US 4618578	A	19861021	US 1984-631669	19840717
EP 175787	A1	19860402	EP 1985-902226	19850404

EP 175787	B1	19950215			
R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE					
EP 628633	A1	19941214	EP	1994-202224	19850404
EP 628633	B1	20030108			
R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE					
AT 230798	E	20030115	AT	1994-202224	19850404
CA 1337181	A1	19951003	CA	1985-478661	19850409
US 5171568	A	19921215	US	1989-416425	19891002
US 5612041	A	19970318	US	1994-312666	19940927
US 5750114	A	19980512	US	1995-452963	19950530
US 5759814	A	19980602	US	1995-465467	19950605

PRIORITY APPLN. INFO.:

US 1984-597784	A	19840406
US 1984-631669	A	19840717
EP 1985-902226	A3	19850404
US 1986-921213	B2	19861020
US 1986-921214	B1	19861020
US 1986-921730	B1	19861020
US 1987-79605	B1	19870720
US 1989-416425	A1	19891002
US 1990-477027	B1	19900208
US 1990-587179	A3	19900920
US 1992-990919	B1	19921215
US 1992-991703	B1	19921217
US 1992-993415	B1	19921221
US 1993-138717	B1	19931018
US 1994-351875	A3	19941208
US 1995-385731	A1	19950208

AB Vaccines effective against herpes simplex virus (HSV) are produced by using HSV glycoproteins gB and gD. Thus, gB expression vectors pHS112 and pHS114 were constructed from pSV1/dhfr. Plasmids pYHS109 and pYHS110 which carry the synthetic sequences of gD-A and gD-B, resp., were constructed as well as plasmid pYHS115 which carries the naturally-occurring gD gene of **HSV-1**. The resulting recombinant glycoproteins were used without modification, either together or sep., in a vaccine against HSV. For example, mice were immunized on day 1 with a 1:1 mixt. of recombinant vaccine prepn. and complete Freund's adjuvant. The mice received either 20 .mu.g recombinant gD or 5 .mu.g recombinant gB. Serum from mouse bleeds were collected and assayed for antibody levels by ELISA and plaque redn. neutralization assay.

IT **104137-45-3**
RL: PRP (Properties)
(DNA sequence of)

L3 ANSWER 19 OF 21 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER:	1985:449151 HCAPLUS
DOCUMENT NUMBER:	103:49151
TITLE:	Immunologically reactive non-glycosylated amino acid chains of glycoprotein B of **herpes** virus types **1** and 2
INVENTOR(S):	Person, Stanley
PATENT ASSIGNEE(S):	USA
SOURCE:	Eur. Pat. Appl., 44 pp. CODEN: EPXXDW
DOCUMENT TYPE:	Patent
LANGUAGE:	English
FAMILY ACC. NUM. COUNT:	1
PATENT INFORMATION:	

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 133063	A1	19850213	EP 1984-401312	19840622
EP 133063	B1	19870107		
R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE				
US 4642333	A	19870210	US 1984-622496	19840620
DK 8403057	A	19841224	DK 1984-3057	19840622
AT 24730	E	19870115	AT 1984-401312	19840622
JP 60115529	A2	19850622	JP 1984-129915	19840623
PRIORITY APPLN. INFO.:			US 1983-506986	19830623
			US 1983-532996	19830916
			EP 1984-401312	19840622

AB Plasmids are constructed that contain nucleotide sequences that specify immunol. active portions of glycoprotein B of **herpes** simplex viruses **1** and 2, and amino acid chains are prepd. to serve in vaccines. Thus, plasmid pKBXX, which contained the glycoprotein B gene of **herpes** simplex virus **1** strain KOS, and plasmid p52BXX, which contained the gene from herpes simplex virus 2 strain HG52 were constructed by std. methods of recombinant DNA technol. The 2 plasmids were used to construct other recombinant plasmids that allowed the expression of glycoprotein B amino acid residues 135-629 (herpes simplex virus 2) or residues 165-629 (**herpes** simplex virus **1**) as .apprx.65-kilodalton fusion proteins with .beta.-galactosidase [**97264-62-5**] of Escherichia coli. The claimed protein regions were not glycosylated. The fusion protein contg. the glycoprotein B fragment from herpes simplex virus 2 increased survival rates in mice injected with LDs of herpes simples virus 2.

IT **97263-89-3 97264-62-5**
RL: PRP (Properties); BIOL (Biological study)
(nucleotide sequence of)

L3 ANSWER 20 OF 21 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER:	1985:107216 HCAPLUS
DOCUMENT NUMBER:	102:107216
TITLE:	Anatomy of the **herpes** simplex virus **1** strain F glycoprotein B gene: primary sequence and predicted protein structure of the wild type and of monoclonal antibody-resistant mutants
AUTHOR(S):	Pellett, Philip E.; Kousoulas, Konstantin G.; Pereira, Lenore; Roizman, Bernard
CORPORATE SOURCE:	Marjorie B. Kovler Viral Oncol. Lab., Univ. Chicago, Chicago, IL, 60637, USA
SOURCE:	Journal of Virology (1985), 53(1), 243-53 CODEN: JOVIAM; ISSN: 0022-538X
DOCUMENT TYPE:	Journal
LANGUAGE:	English

AB The nucleotide sequence and predicted amino acid sequence of glycoprotein B of **herpes** simplex virus **1** strain F and the amino acid substitutions in the domains of the glycoprotein B gene of 3 mutants selected for resistance to monoclonal antibody H126-5 or H233 but not to both are reported. Analyses of the amino acid sequence with respect to hydropathicity and secondary structure yielded a 2-dimensional model of the protein. The model predicts an N-terminal, 29-amino acid cleavable signal sequence, a 696-amino acid hydrophilic surface domain contg.

6 potential sites for N-linked glycosylation, a 69-amino acid hydrophobic domain contg. 3 segments traversing the membrane, and a charged 109-amino acid domain projecting into the cytoplasm and previously shown to marker rescue glycoprotein B syn mutations. The nucleotide sequence of the mutant glycoprotein B DNA fragments previously shown to marker transfer or rescue the mutations revealed that the amino acid substitutions cluster in the hydrophilic surface domain between amino acids 273 and 305. Analyses of the secondary structure of these regions, coupled with the exptl. derived observation that the H126-5- and H233-antibody cognitive sites do not overlap, indicate the approx. locations of the epitopes of these neutralizing, surface-reacting, and immune-pptg. monoclonal antibodies. The predicted perturbations in the secondary structure introduced by the amino acid substitutions correlate with the extent of loss of reactivity with monoclonal antibodies in various immunoassays.

IT **95077-19-3 95077-20-6 95077-21-7**
95077-22-8
RL: PRP (Properties); BIOL (Biological study)
(nucleotide sequence of)

L3 ANSWER 21 OF 21 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1984:449347 HCAPLUS
DOCUMENT NUMBER: 101:49347
TITLE: Nucleotide sequence specifying the glycoprotein gene, gB, of **herpes** simplex virus type **1**
AUTHOR(S): Bzik, David J.; Fox, Barbara A.; DeLuca, Neal A.; Person, Stanley
CORPORATE SOURCE: Mol. Cell Biol. Prog., Pennsylvania State Univ., University Park, PA, 16802, USA
SOURCE: Virology (1984), 133(2), 301-14
CODEN: VIRLAX; ISSN: 0042-6822
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The nucleotide sequence thought to specify the glycoprotein gene, gB, of the KOS strain of **herpes** simplex virus type **1** (**HSV-1**) was detd. A 3.1-kilobase (kb), virus-specified RNA was mapped to the left half of the BamHI-G fragment (0.345 to 0.399 map units). TATA, CAT-box, and possible mRNA start sequences characteristic of **HSV-1** genes are found near 0.368 map units. The 1st available ATG codon is at 0.366 and the 1st in-phase chain terminator at 0.348 map units. A poly A-addn. signal (AATAAA) occurs 17 nucleotides past the chain terminator. Translation of these sequences would yield a 100.3-kilodalton (kDa) polypeptide characterized by a 5' signal sequence, 9 N-linked saccharide addn. sites, a strongly hydrophobic membrane-spanning sequence, and a highly charged 3' cytoplasmic anchor sequence. Two mutants of KOS, tsJ12, and tsJ20, that are temp.-sensitive for viral growth and for the prodn. of gB, have been phys. mapped to 0.357 to 0.360 and 0.360 to 0.364 map units, resp. The nucleotide sequence of the mutants was detd. in these regions. In each case, a single amino acid replacement within the 100.3-kDa polypeptide is predicted from the sequence anal.

IT **91117-04-3 91117-05-4 91117-06-5**
RL: PRP (Properties); BIOL (Biological study)
(nucleotide sequence of)

E1 THROUGH E35 ASSIGNED

FILE 'REGISTRY' ENTERED AT 12:49:01 ON 22 SEP 2003
L4 35 SEA FILE=REGISTRY ABB=ON PLU=ON (104137-45-3/BI OR 141157-47-3/BI OR 187125-82-2/BI OR 107565-05-9/BI OR 91117-04-3/BI OR 91117-05-4/BI OR 91117-06-5/BI OR 95077-19-3/BI OR 107216-58-0/BI OR 107216-59-1/BI OR 112263-08-8/BI OR 117443-26-2/BI OR 117443-27-3/BI OR 118366-27-1/BI OR 119330-92-6/BI OR 119330-93-7/BI OR 134802-63-4/BI OR 134802-64-5/BI OR 134802-65-6/BI OR 134802-67-8/BI OR 134802-68-9/BI OR 138756-22-6/BI OR 138756-23-7/BI OR 138756-24-8/BI OR 139382-49-3/BI OR 174253-33-9/BI OR 240797-43-7/BI OR 246050-56-6/BI OR 391533-82-7/BI OR 391834-38-1/BI OR 95077-20-6/BI OR 95077-21-7/BI OR 95077-22-8/BI OR 97263-89-3/BI OR 97264-62-5/BI)

L4 ANSWER 1 OF 35 REGISTRY COPYRIGHT 2003 ACS on STN
RN **391834-38-1** REGISTRY
CN GenBank Z86099 (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 17: PN: WO03038440 TABLE: 1 unclaimed DNA
SQL 154746
MF Unspecified
CI MAN

REFERENCE 1: 138:362667

L4 ANSWER 2 OF 35 REGISTRY COPYRIGHT 2003 ACS on STN
RN **391533-82-7** REGISTRY
CN GenBank X14112 (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 17: PN: WO03038440 TABLE: 1 unclaimed DNA
CN 204: PN: WO03014381 SEQID: 85 unclaimed DNA
CN GenBank D00317 (Secondary GenBank Accession Number)
CN GenBank D00374 (Secondary GenBank Accession Number)
CN GenBank S40593 (Secondary GenBank Accession Number)
SQL 152261
MF Unspecified
CI MAN

REFERENCE 1: 138:362667

REFERENCE 2: 138:183112

L4 ANSWER 3 OF 35 REGISTRY COPYRIGHT 2003 ACS on STN
RN **246050-56-6** REGISTRY
CN DNA (human herpesvirus 1 strain HSZP gene UL27) (9CI) (CA INDEX NAME)
OTHER NAMES:
CN GenBank AF097023
SQL 2715
MF Unspecified
CI MAN

REFERENCE 1: 132:261299

L4 ANSWER 4 OF 35 REGISTRY COPYRIGHT 2003 ACS on STN

RN **240797-43-7** REGISTRY
CN DNA, d(A-G-C-A-G-G-C-C-G-C-T-G-T-C-C-T-T-G) (9CI) (CA INDEX NAME)
SQL 18
MF Unspecified
CI MAN

REFERENCE 1: 131:194970

L4 ANSWER 5 OF 35 REGISTRY COPYRIGHT 2003 ACS on STN
RN **187125-82-2** REGISTRY
CN DNA (human herpesvirus 2 strain HG52) (9CI) (CA INDEX NAME)
SQL 154746
MF Unspecified
CI MAN

REFERENCE 1: 133:247795

REFERENCE 2: 129:314960

REFERENCE 3: 128:253529

L4 ANSWER 6 OF 35 REGISTRY COPYRIGHT 2003 ACS on STN
RN **174253-33-9** REGISTRY
CN DNA (human herpesvirus 1 strain ANG-path gene gB) (9CI) (CA INDEX NAME)
OTHER NAMES:
CN GenBank U49121
SQL 2715
MF Unspecified
CI MAN

REFERENCE 1: 126:101630

L4 ANSWER 7 OF 35 REGISTRY COPYRIGHT 2003 ACS on STN
RN **141157-47-3** REGISTRY
CN DNA (human herpesvirus 1 strain 17) (9CI) (CA INDEX NAME)
SQL 152260
MF Unspecified
CI MAN

REFERENCE 1: 135:136412

REFERENCE 2: 133:247795

REFERENCE 3: 132:949

REFERENCE 4: 129:314960

L4 ANSWER 8 OF 35 REGISTRY COPYRIGHT 2003 ACS on STN
RN **139382-49-3** REGISTRY
CN DNA, (human herpesvirus 1 strain Miyama 1-691-glycoprotein B[Met-1]-(691.fwdarw.22')-human herpesvirus 1 strain Miyama clone pH5D106 22-302-glycoprotein D precursor[Ser22Arg23Ala24]-specifying) (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Deoxyribonucleic acid, (herpes simplex virus 1 strain Miyama 1-691-glycoprotein B[Met-1]-(691.fwdarw.22')-herpes simplex virus 1 strain Miyama clone pH5D106 22-302-glycoprotein D

precursor[Ser22Arg23Ala24]-specifying)
SQL 2925
MF Unspecified
CI MAN

REFERENCE 1: 116:122643

L4 ANSWER 9 OF 35 REGISTRY COPYRIGHT 2003 ACS on STN
RN **138756-24-8** REGISTRY
CN DNA, (human herpesvirus 1 strain Miyama clone pHSB106.DELTA.Tth 30-904-glycoprotein B precursor[Met30]-specifying) (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Deoxyribonucleic acid, (herpes simplex virus 1 strain Miyama clone pHSB106.DELTA.Tth 30-904-glycoprotein B precursor[Met30]-specifying)
SQL 2088
MF Unspecified
CI MAN

REFERENCE 1: 116:77825

L4 ANSWER 10 OF 35 REGISTRY COPYRIGHT 2003 ACS on STN
RN **138756-23-7** REGISTRY
CN DNA (human herpesvirus 1 strain Miyama clone pHSB200 glycoprotein B-specifying) (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Deoxyribonucleic acid (herpes simplex virus 1 strain Miyama clone pHSB200 glycoprotein B-specifying)
SQL 2625
MF Unspecified
CI MAN

REFERENCE 1: 116:77825

L4 ANSWER 11 OF 35 REGISTRY COPYRIGHT 2003 ACS on STN
RN **138756-22-6** REGISTRY
CN DNA, (human herpesvirus 1 strain Miyama clone pHSB200 glycoprotein B gene plus flanks) (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Deoxyribonucleic acid, (herpes simplex virus 1 strain Miyama clone pHSB200 glycoprotein B gene plus 5'- and 3'-flanking region fragment)
SQL 3465
MF Unspecified
CI MAN

REFERENCE 1: 116:77825

L4 ANSWER 12 OF 35 REGISTRY COPYRIGHT 2003 ACS on STN
RN **134802-68-9** REGISTRY
CN DNA (human herpesvirus 1 strain Miyama glycoprotein B gene plus flanks) (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Deoxyribonucleic acid (herpes simplex virus 1 strain Miyama glycoprotein B gene plus 5'- and 3'-flanking region fragment)
SQL 3465
MF Unspecified
CI MAN

REFERENCE 1: 115:272654

L4 ANSWER 13 OF 35 REGISTRY COPYRIGHT 2003 ACS on STN
RN **134802-67-8** REGISTRY
CN DNA (human herpesvirus 1 strain Miyama glycoprotein B gene) (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Deoxyribonucleic acid (herpes simplex virus 1 strain Miyama glycoprotein B gene)
SQL 2715
MF Unspecified
CI MAN

REFERENCE 1: 115:272654

L4 ANSWER 14 OF 35 REGISTRY COPYRIGHT 2003 ACS on STN
RN **134802-65-6** REGISTRY
CN DNA (human herpesvirus 1 strain KOS glycoprotein B gene plus flanks) (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Deoxyribonucleic acid (herpes simplex virus 1 strain KOS glycoprotein B gene plus 5'- and 3'-flanking region fragment)
SQL 3755
MF Unspecified
CI MAN

REFERENCE 1: 115:272654

L4 ANSWER 15 OF 35 REGISTRY COPYRIGHT 2003 ACS on STN
RN **134802-64-5** REGISTRY
CN DNA (human herpesvirus 1 strain F glycoprotein B gene plus flanks) (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Deoxyribonucleic acid (herpes simplex virus 1 strain F glycoprotein B gene plus 5'- and 3'-flanking region fragment)
SQL 3996
MF Unspecified
CI MAN

REFERENCE 1: 115:272654

L4 ANSWER 16 OF 35 REGISTRY COPYRIGHT 2003 ACS on STN
RN **134802-63-4** REGISTRY
CN DNA (human herpesvirus 1 glycoprotein B gene) (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Deoxyribonucleic acid (herpes simplex virus 1 glycoprotein B gene)
SQL 2712
MF Unspecified
CI MAN

REFERENCE 1: 115:272654

L4 ANSWER 17 OF 35 REGISTRY COPYRIGHT 2003 ACS on STN
RN **119330-93-7** REGISTRY
CN DNA (human herpesvirus 1 clone pYGB1 glycoprotein B gene plus flanks) (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:

CN Deoxyribonucleic acid (herpes simplex virus 1 clone pYGB1 glycoprotein B gene plus 5'- and 3'-flanking region fragment)
SQL 3098
MF Unspecified
CI MAN

REFERENCE 1: 110:113190

L4 ANSWER 18 OF 35 REGISTRY COPYRIGHT 2003 ACS on STN
RN **119330-92-6** REGISTRY
CN DNA (human herpesvirus 1 clone pYGB1 glycoprotein B gene) (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Deoxyribonucleic acid (herpes simplex virus 1 clone pYGB1 glycoprotein B gene)
SQL 2711
MF Unspecified
CI MAN

REFERENCE 1: 110:113190

L4 ANSWER 19 OF 35 REGISTRY COPYRIGHT 2003 ACS on STN
RN **118366-27-1** REGISTRY
CN DNA (human herpesvirus 1 strain 17 gene UL27) (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Deoxyribonucleic acid (herpes simplex virus 1 strain 17 gene UL27)
SQL 2715
MF Unspecified
CI MAN

REFERENCE 1: 110:34475

L4 ANSWER 20 OF 35 REGISTRY COPYRIGHT 2003 ACS on STN
RN **117443-27-3** REGISTRY
CN DNA, (human herpesvirus 1 strain Patton clone pHS108 glycoprotein B gene plus 5'-and 3'-flank) (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Deoxyribonucleic acid, (herpes simplex virus 1 strain Patton clone pHS108 glycoprotein B gene plus 5'-and 3'-flanking region fragment)
SQL 3472
MF Unspecified
CI MAN

REFERENCE 1: 109:197165

L4 ANSWER 21 OF 35 REGISTRY COPYRIGHT 2003 ACS on STN
RN **117443-26-2** REGISTRY
CN DNA, (human herpesvirus 2 strain 333 clone pHS210 glycoprotein B gene plus flanks) (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Deoxyribonucleic acid, (herpes simplex virus 2 strain 333 clone pHS210 glycoprotein B gene plus 5'- and 3'-flanking region fragment)
SQL 3472
MF Unspecified
CI MAN

REFERENCE 1: 109:197165

L4 ANSWER 22 OF 35 REGISTRY COPYRIGHT 2003 ACS on STN
RN **112263-08-8** REGISTRY
CN DNA (human herpesvirus 1 strain KOS321 glycoprotein B gene) (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Deoxyribonucleic acid (herpes simplex virus 1 strain KOS321 glycoprotein B gene)
SQL 2715
MF Unspecified
CI MAN

REFERENCE 1: 108:32766

L4 ANSWER 23 OF 35 REGISTRY COPYRIGHT 2003 ACS on STN
RN **107565-05-9** REGISTRY
CN DNA (human herpesvirus 2 strain 333 clone pHS208 glycoprotein B gene) (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Deoxyribonucleic acid (herpes simplex virus 2 strain 333 clone pHS208 glycoprotein B gene)
SQL 2712
MF Unspecified
CI MAN

REFERENCE 1: 109:197165

REFERENCE 2: 106:208535

L4 ANSWER 24 OF 35 REGISTRY COPYRIGHT 2003 ACS on STN
RN **107216-59-1** REGISTRY
CN DNA (human herpesvirus 1 strain tsB5 glycoprotein B gene) (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Deoxyribonucleic acid (herpes simplex virus 1 strain tsB5 glycoprotein B gene)
SQL 2715
MF Unspecified
CI MAN

REFERENCE 1: 106:114355

L4 ANSWER 25 OF 35 REGISTRY COPYRIGHT 2003 ACS on STN
RN **107216-58-0** REGISTRY
CN DNA (human herpesvirus strain HG52 clone p52BXX glycoprotein B gene) (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Deoxyribonucleic acid (herpes simplex virus strain HG52 clone p52BXX glycoprotein B gene)
SQL 2715
MF Unspecified
CI MAN

REFERENCE 1: 106:114355

L4 ANSWER 26 OF 35 REGISTRY COPYRIGHT 2003 ACS on STN
RN **104137-45-3** REGISTRY
CN DNA (human herpesvirus 1 strain Patton glycoprotein B gene) (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:
CN Deoxyribonucleic acid (herpes simplex virus 1 strain Patton glycoprotein B gene)
SQL 2715
MF Unspecified
CI MAN

REFERENCE 1: 109:197165

REFERENCE 2: 106:208535

REFERENCE 3: 105:120737

L4 ANSWER 27 OF 35 REGISTRY COPYRIGHT 2003 ACS on STN
RN **97264-62-5** REGISTRY
CN RNA (human herpesvirus 1 strain KOS clone pKBXX glycoprotein B-specifying messenger) (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Ribonucleic acid (herpes simplex virus 1 strain KOS clone pKBXX glycoprotein B-specifying messenger)
SQL 3043
MF Unspecified
CI MAN

REFERENCE 1: 103:49151

L4 ANSWER 28 OF 35 REGISTRY COPYRIGHT 2003 ACS on STN
RN **97263-89-3** REGISTRY
CN DNA (human herpesvirus 1 strain KOS clone pKBXX glycoprotein B gene) (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Deoxyribonucleic acid (herpes simplex virus 1 strain KOS clone pKBXX glycoprotein B gene)
SQL 2712
MF Unspecified
CI MAN

REFERENCE 1: 105:1702

REFERENCE 2: 103:49151

L4 ANSWER 29 OF 35 REGISTRY COPYRIGHT 2003 ACS on STN
RN **95077-22-8** REGISTRY
CN DNA (human herpesvirus 1 strain F mutant R233/S9 glycoprotein B gene) (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Deoxyribonucleic acid (herpes simplex virus 1 strain F mutant R233/S9 glycoprotein B gene)
SQL 2712
MF Unspecified
CI MAN

REFERENCE 1: 102:107216

L4 ANSWER 30 OF 35 REGISTRY COPYRIGHT 2003 ACS on STN
RN **95077-21-7** REGISTRY
CN DNA (human herpesvirus 1 strain F mutant R126/S8 glycoprotein B gene) (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:
CN Deoxyribonucleic acid (herpes simplex virus 1 strain F mutant R126/S8 glycoprotein B gene)
SQL 2712
MF Unspecified
CI MAN

REFERENCE 1: 102:107216

L4 ANSWER 31 OF 35 REGISTRY COPYRIGHT 2003 ACS on STN
RN **95077-20-6** REGISTRY
CN DNA (human herpesvirus 1 strain F mutant R126/B1 glycoprotein B gene) (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Deoxyribonucleic acid (herpes simplex virus 1 strain F mutant R126/B1 glycoprotein B gene)
SQL 2712
MF Unspecified
CI MAN

REFERENCE 1: 102:107216

L4 ANSWER 32 OF 35 REGISTRY COPYRIGHT 2003 ACS on STN
RN **95077-19-3** REGISTRY
CN DNA (human herpesvirus 1 strain F glycoprotein B gene) (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Deoxyribonucleic acid (herpes simplex virus 1 strain F glycoprotein B gene)
SQL 2712
MF Unspecified
CI MAN

REFERENCE 1: 115:272654

REFERENCE 2: 102:107216

L4 ANSWER 33 OF 35 REGISTRY COPYRIGHT 2003 ACS on STN
RN **91117-06-5** REGISTRY
CN DNA (human herpesvirus 1 strain KOS mutant tsJ20 glycoprotein B gene) (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Deoxyribonucleic acid (herpes simplex virus 1 strain KOS mutant tsJ20 glycoprotein B gene)
SQL 2713
MF Unspecified
CI MAN

REFERENCE 1: 106:114355

REFERENCE 2: 101:49347

L4 ANSWER 34 OF 35 REGISTRY COPYRIGHT 2003 ACS on STN
RN **91117-05-4** REGISTRY
CN DNA (human herpesvirus 1 strain KOS mutant tsJ12 glycoprotein B gene) (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Deoxyribonucleic acid (herpes simplex virus 1 strain KOS mutant

tsJ12 glycoprotein B gene)
SQL 2716
MF Unspecified
CI MAN

REFERENCE 1: 106:114355

REFERENCE 2: 101:49347

L4 ANSWER 35 OF 35 REGISTRY COPYRIGHT 2003 ACS on STN
RN **91117-04-3** REGISTRY
CN DNA (human herpesvirus 1 strain KOS glycoprotein B gene) (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Deoxyribonucleic acid (herpes simplex virus 1 strain KOS glycoprotein B gene)
SQL 2715
MF Unspecified
CI MAN

REFERENCE 1: 106:114355

REFERENCE 2: 101:49347

FILE 'HOME' ENTERED AT 12:49:41 ON 22 SEP 2003